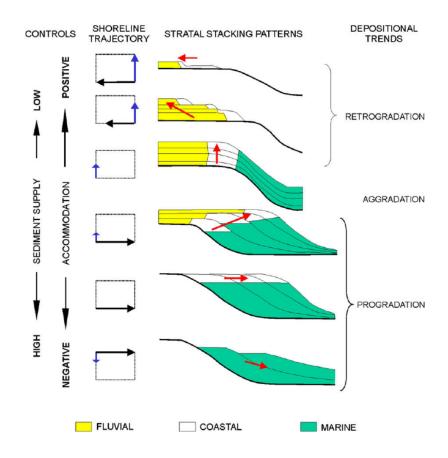
9 Figures

Rift sequence stratigraphy

Article · Jan 2010 · Marine and Petroleum Geology

Recommend publication

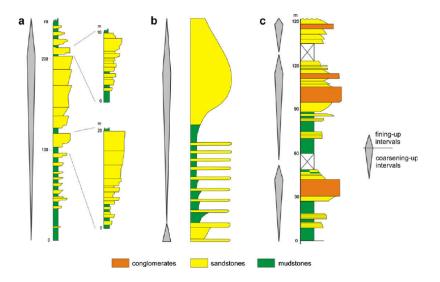


Figure



Fig. 1. Depositional trends (progradation, retrogradation, aggradation) as a response of the interplay of accommodation and sediment supply (modified from Van Wagoner et al., 1990). Black arrows represent the horizontal (progradational or retrogradational) component, blue arrows the aggradational component, and the red arrows the resultant shoreline trajectory. (For interpretation of the references to colour in this figure legend, the reader is...

1 Recommendation



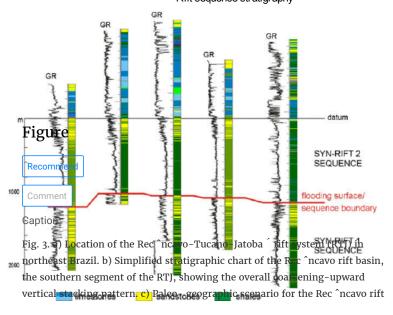
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Caption

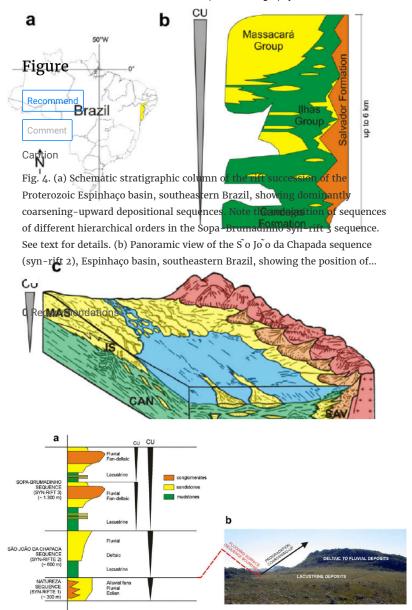
Fig. 2. Stratigraphic columns showing the coarsening-upward vertical stacking pattern that is typical of sequences accumulated in rift basins. Columns (a) and (b) are conceptual, whereas column (c) illustrates the Proterozoic, lacustrine-alluvial deposits of the Sopa-Brumadinho sequence (part of the syn-rift stage, Espinhaço Basin, Brazil). The fining-upward trends that are observed at the top of sequences may correspond to spans of time toward...

0 Recommendations



basin (modified after Da Silva, 1993), showing the development of the coarsening-upward (CU) stacking pattern through the progradation of...

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Figure

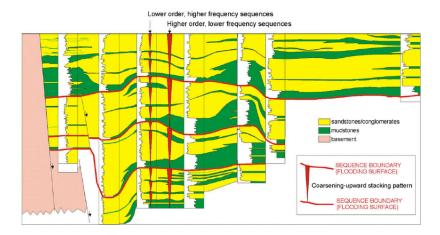
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Comment

Caption

Fig. 5. Well-log cross-section of correlation in a Brazilian marginal, Cretaceous rift basin, showing two depositional sequences separated by a flooding surface (well data courtesy of Petrobras). The flooding surface is well defined in the lithologic and gamma-ray logs. Note the coarsening-upward stacking pattern of both sequences. The section is about 50 km long. Abbreviation: GR 1/4 gamma-ray.

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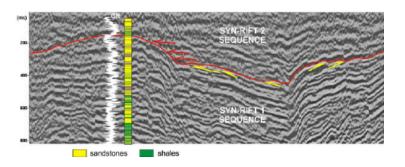
Figure



Caption

Fig. 6. Well-log cross-section of correlation in the Viking graben, North-Sea rift (modified after Frostick and Steel, 1993b), where four coarsening-upward depositional sequences, bounded by flooding surfaces, can be recognized. The sharp basal contacts of the deep-marine shales define flooding surfaces (sequence boundaries). The axial progradation of sandstones and conglomerates generates overall coarsening-upward stacking patterns. Note the...

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Figure



Fig. 7. Seismic section calibrated with borehole data, showing a rift-